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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
TANG, SON M	

ART UNIT	PAPER NUMBER
2612	

NOTIFICATION DATE	DELIVERY MODE
07/01/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No.	Applicant(s)	
	10/569,946	ATHERTON, PETER SAMUEL	
	Examiner	Art Unit	
	SON M. TANG	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-57* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18 and 48-57* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *19-47* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 July 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/28/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species Group I of Figs. 1-2 refers to claims 1-9, 48-51 and 52-57 and Group II of Figs. 4-5 refers to claims 19-30, 31-42 and 43-47. The species are independent or distinct because claims to the different species recite the mutually exclusive characteristics of such species. In addition, these species are not obvious variants of each other based on the current record.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species to be examined even though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected species**, including

any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

The election of the species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the election of species requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected species.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the species unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other species.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141.

2. During a telephone conversation with Matthew Schneider on 4/2/08 a provisional election was made without traverse to prosecute the invention of Group I, claim1-9, 48-51 and 52-57. Affirmation of this election must be made by applicant in replying to this Office action. Claims 19-47 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 10, 48 and 52 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 37, 51 and 70 of U.S. Patent No. 6,888,509 in view of Beigel US 6,181,287. Pat. 509' lack of a second electrically conductive region associated with the bottom surface of the substrate and electrically coupled to the first conductive region, both conductive regions forming RFID antennas. Beigel teaches an RFID tag comprises a capacitive coupling, whereby, the first electrically region (17) and second electrically region (14) are forming an RFID antennas [see Fig. 2]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention to modify the capacitive coupling antenna of Beigel into the tamper RFID tag of 509', for the benefit of increasing sensitivity of RFID tag tamper detection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims **1-10, 13, 48, 50-52 and 54-57** are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al. [US 6,794,00] in view of Shimamura et al. [US 6,094,133].

Regarding claims 1, 10, 48 and 52 : Adams discloses a tamper evident RFID tag, comprising:

-a substrate is inherently included with the transponder and having a top surface and a bottom surface;

-an RFID integrated circuit is inherently disposed on the top surface of the substrate [see Abstract line 2-4], a second electrically conductive region (18) associated with the bottom surface of the substrate layer (16), an attachment layer (20) associated with the bottom surface of the substrate for attaching the tag to a surface (22), and an adhesion modifying layer (release agent 16) modifying the adhesion of the second conductive region (18) such that the second conductive region is disrupted if the tag is tampered or removed from the surface [see Fig. 1, col. 3, lines 35-65]. Adams does not specifically show a first electrically conductive region associated with the top surface of the substrate, Shimamura teaches a LC tag (1, Fig. 8) comprising an arrangement of a first conductive region (4) associated with the top surface of the substrate, wherein, the tag is being destroyed when the first conductive region (4) is being separated from the second conductive region (5) [see col. 40-58], this LC tag antennas arrangement is similarly to transponder capacitive coupling antenna technology. Since, both references are used for detecting tamper by the damaged of the antenna. Therefore, it would have been obvious of one having ordinary skill in the art would employ a second conductive region for detecting tamper as suggested by Shimamura into the tamper evident RFID tag of Adams, for the purpose of increasing the detection sensitivity, since capacitive coupling antenna is easy to separate due to non-contacting coupling method.

Regarding claims 2-3: The claimed of "the second conductive region of capacitive coupling" had been considered in the claim above.

Regarding claim 4: The claimed "the first conductive region is directly coupled to the RFID integrated circuit" is inherently included, because antenna (18) is the only antenna of the RFID tag, which considers as a first conductive region, and the antenna (18) performs as a conductive coupling not a capacitive coupling antenna.

Regarding claims 5, 50, 54: Adams further discloses that the adhesion modifying layer (agent release 16) is arranged between the bottom of the substrate and the second conductive region (18) [see Fig. 1].

Regarding claims 6, 51, 55: Adams and Shimamura made of obvious above, except for not specifically show that the adhesion modifying layer is arranged between the second conductive region and the attachment layer. Adams teaches in terms of the adhesive bond strength [see Figs. 2-11], wherein, the adhesive patterns (20) can be modified in a plurality of concepts, the adhesive is being modified to serve the specific purpose as user desired shown in Figs. 2-11. Therefore, it would have been obvious of one having ordinary skill in the art at the time the invention was made to implement the adhesion modifying layer (met by agent release 16) in between the antenna (18) and the attachment layer (20), so that the concept of modifying adhesive at the antenna and surface can serve the specification of the user desired.

Regarding claims 7, 56: Adams teaches that the attachment layer met by pattern adhesive (20).

Regarding claims 8, 57: Adams further shows an overlayer (transponder carrier film 14) formed over the first conductive region and the RFID integrated circuit.

Regarding claim 9: Adams further shows printed graphics (label face sheet 10) applied to the tag.

Regarding claim 13: Adams further shows that the second conductive region (20) is arranged around a perimeter of the bottom surface of the substrate [see Figs. 7 and 9].

6. Claims **14, 18, 49 and 53** are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al. in view of Shimamura et al., and further in view of Soehnlen [US 2002/0067264].

Regarding claims 14, 18, 49 and 53: Adams and Shimamura made of obvious above, but does not specifically mention that the RFID integrated circuit is adapted to transmit information representing the at least one electrical property of the second conductive region. Soehnlen teaches a tamper evident RFID system comprises an RFID integrated circuit to transmit information representing the degree of tampering and access to the package [see Fig. 3, paragraphs 0032 and 0034], Although, Soehnlen does not mention that the transmit information representing the electrical impedance value of the second conductive region. Soehnlen stated a series of modifications to the interrogation responses, including the level and degree of tampering to the package, thus, one having ordinary skill in the art would found it obvious that the degree of tampering to the package can be determined by the level damaged of the antenna, the modified response signal reflect of the impedance of the damage antenna (conductive region). It would have been obvious of one having ordinary skill in the art would implement the modified response signal to the interrogator, which representing the degree or value of the RFID tag's antenna impedance damaged.

7. Claims **11-12 and 15-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al. in view of Shimamura et al., and further in view of Beigel [US 6,181,287].

Regarding claim 15: Adams and Shimamura disclose all the limitations as described above, except for not specifically show a power source within the tag and coupled to RFID integrated circuit. Beigel teaches an RFID tag comprises a power source (power rectifier 30) coupled to the IC (18) [Fig. 3-4]. It would have been obvious of one having skill in the art that some RFID tag may need power source to operate the integrated circuit as suggested by Beigel.

Regarding claims 11-12, 16: Beigel further teaches at least one coupling circuit (terminal 17) directly connected to the RFID integrated circuit (18) for electrically coupling the RFID integrated circuit to the second conductive region (14) [see Fig. 2, col. 2, lines 45-48].

Regarding claim 17: Beigel further teaches at least one coupling circuit (conductive/capacitive 19) arranged on the bottom surface of the substrate and connected to the second conductive region (14), for coupling of the second conductive region to the RFID integrated circuit [see Fig. 4, col. 3, lines 3-6].

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gusafson [US 6,050,622], Babb et al. [US 6,569,508], Yde-Andersen et al. [US

6,680,702], Baldwin [US 5,884,425], Kuhns [US 7,102,522], Conwell et al. [US 7,095,324], Suzuki et al. [US 6,518,887].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SON M. TANG whose telephone number is (571)272-2962. The examiner can normally be reached on 5/8.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George A. Bugg can be reached on (571)272-2998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Son Tang

/George A Bugg/
Acting SPE of Art Unit 2612